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Always Promote the Inevitable

William Nickas, *Editor-in-Chief*

In the Summer 2014 issue of *ASPIRE*,TM I discussed how human talent and creativity is as vital as technique. It is also completely necessary as our profession pushes ahead to the next generation of concrete bridges. In this issue, we feature our second contractor profile, which emphasizes how selecting and maximizing internal and external skills for a project creates the most powerful solutions for their team.

In 2004, I was asked to serve as a delegate on a team looking at prefabricated bridge elements and systems (PBES) in Japan and Europe. Little did I know that the team, which was co-lead by Mary Lou Ralls of the TxDOT (now retired and an independent consultant) and Ben Tang of the Federal Highway Administration (FHWA) (now retired and at Oregon DOT), would offer some of the framework used to motivate so many engineers in re-thinking our profession.


In a 2008 meeting, Mike Culmo of CME Associates shared with the participants of the Transportation Research Board Workshop 109 a thought-provoking question: "Is the old adage 'you can only have two of the three: High Quality, Rapid Construction, or Low Cost' still valid when it comes to accelerated bridge construction (ABC), or will we deliver ABC bridges with all three attributes?"

This momentum for change was truly accelerated with FHWA's programs like Highways for LIFE, Peer2Peer Summits, and Everyday Counts. Procurement and delivery techniques are always changing and departments of transportation (DOTs) guide those changes through their systems routinely. The applied physics, upon which structural engineering is based, will always remain the same; many DOT bridge design manuals take years to change. It is the "hows" and "whats" that we work to reinvent at times. These are what

take the longest. Over the last 10 years, our profession has built up a good backlog of the newest ABC concrete bridge experiences. In this issue, we are including the final article in the ABC series.

In this ABC feature, the authors further demystify how designers in seismic regions do have the ability and desire to re-think the use of ABC structural components and systems. Some of the most complex bridge connection issues come about in seismic areas.

"Always Promote the Inevitable" was a saying used by Octave J. DuTemple, executive director of the American Nuclear Society, to remind his members to recognize that when practical consensus had been reached, stop arguing, and get behind the direction being taken to make it work.

When a change is a natural progression, everyone should get on board, but when it is a major overhaul, there will be those early adopters. . . And sometime these changes just become the way we do it. In an effort to continue to showcase the best practices and briefly offer nuggets of knowledge, the *ASPIRE* team is launching a new series titled, "Concrete Bridge Technology." These topics will cover some of the hows and whys of concrete bridge design, detailing, and construction. This is not intended to stop advancing innovations with the most versatile construction material; however, there are many topics that have a historical significance and may be worth re-sharing. As an inventory of ideas for ground breaking research is assembled and orchestrated (see Graybeal's Summer 2014 *ASPIRE* article), the *ASPIRE* team is picking selected topics to bring forward tidbits of history. If you have a specific request, please send us your topic. I hope you enjoy this new series and remember "always promote the inevitable." 



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Cover

Precast, prestressed concrete girders with a length of 145 ft were used for the Hazel Avenue Bridge over the American River in Sacramento, Calif., reducing the number of piers in the sensitive river, which had a salmon-hatching area downstream and a dam upstream. Photo: Flatiron.

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